

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/002447

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 E01B7/12

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 E01B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|----------|--|-----------------------|
| A        | US 1 461 701 A (PSILANDER)<br>10 July 1923 (1923-07-10)<br>page 1, line 36-108; figures 1-4  | 1,2,10,<br>12,13      |
| A        | GB 02608 A A.D. 1911 (EDGAR ALLEN AND<br>COMPANY, LTD.)<br>figures 1-4   | 1,8                   |
| A        | EP 1 138 830 A (BWG BUTZBACHER WEICHENBAU<br>GMBH CO. KG) 4 October 2001 (2001-10-04)<br>cited in the application<br>paragraphs '0024!-'0034!; figures 1-4 | 1                     |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

18 June 2004

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24/06/2004

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Information on patent family members

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|---|
| International Application No<br>PCT/EP2004/002447 |
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| Patent document cited in search report | Publication date | Patent family member(s) |                | Publication date |
|--|------------------|-------------------------|----------------|------------------|
| US 1461701                             | A                | 10-07-1923              |                | NONE             |
| GB 191102608                           | A                | NONE                    |                |                  |
| EP 1138830                             | A                | 04-10-2001              | DE 10015508 A1 | 04-10-2001       |
|  |                  |                         | DE 10015522 A1 | 04-10-2001       |
|  |                  |                         | EP 1138830 A2  | 04-10-2001       |
|  |                  |                         | EP 1138829 A2  | 04-10-2001       |